

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/603,022	06/24/2003	Neelkanth S. Gupte	210_187DIV	2590
7590 07/19/2004			EXAMINER	
Owen D. Marjama			JIANG, CHEN WEN	
WALL MARJAMA & BILINSKI LLP Suite 400			ART UNIT	PAPER NUMBER
101 South Salina Street			3744	
Syracuse, NY 13202			DATE MAILED: 07/19/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

			$\wedge$ $\wedge$ $\wedge$
	Applicati	on No.	Applicant(s)
	10/603,0	22	GUPTE, NEELKANTH S.
Office Action Summary	Examine	<u> </u>	Art Unit
	Chen-We	n Jiang	3744
The MAILING DATE of this communicat Period for Reply	ion appears on the	e cover sheet with	n the correspondence address
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA*  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communication of the period for reply specified above is less than thirty (30) dated if NO period for reply is specified above, the maximum statutor pailure to reply within the set or extended period for reply will, I have reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TION. 'CFR 1.136(a). In no evation. ys, a reply within the staty period will apply and w	ent, however, may a rep tutory minimum of thirty ill expire SIX (6) MONTI dication to become ABA	oly be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).
Status			
1)⊠ Responsive to communication(s) filed o	n <u>24 June 2003</u> .		
	This action is r	non-final.	
3) Since this application is in condition for	allowance except	for formal matte	rs, prosecution as to the merits is
closed in accordance with the practice t	ınder <i>Ex part</i> e Qı	uayle, 1935 C.D.	11, 453 O.G. 213.
Disposition of Claims			
4)⊠ Claim(s) <u>37-58</u> is/are pending in the app	olication.		
4a) Of the above claim(s) is/are w	vithdrawn from co	nsideration.	
5) Claim(s) <u>37,38,41,42,53 and 54</u> is/are a	llowed.		
6)⊠ Claim(s) <u>39,40,43-52 and 55-58</u> is/are r	ejected.		
7) Claim(s) <u>50</u> is/are objected to.			
8) Claim(s) are subject to restriction	i and/or election r	equirement.	
Application Papers			
9) The specification is objected to by the Ex	kaminer.		
10) $\boxtimes$ The drawing(s) filed on <u>24 June 2003</u> is/		· · · · · ·	
Applicant may not request that any objection			, i
Replacement drawing sheet(s) including the	•		
11) The oath or declaration is objected to by	the Examiner. No	ote the attached	Office Action of form P10-192.
riority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for t	foreign priority un	der 35 U.S.C. §	119(a)-(d) or (f).
a) All b) Some * c) None of:			
1. Certified copies of the priority doc			nligation No
<ul><li>2. Certified copies of the priority doc</li><li>3. Copies of the certified copies of the</li></ul>		•	·
application from the International	• •		eccived in this National Stage
* See the attached detailed Office action fo			eceived.
Attachment(s)		•	
) Notice of References Cited (PTO-892)		4) Interview Su	mmary (PTO-413)
) D Notice of Draftsperson's Patent Drawing Review (PTO-9		Paper No(s)/	Mail Date
<ul> <li>Information Disclosure Statement(s) (PTO-1449 or PTC Paper No(s)/Mail Date <u>20030624</u>.</li> </ul>	0/SB/08)	5) Notice of Infe	ormal Patent Application (PTO-152) 
Patent and Trademark Office		,	-
TOL-326 (Rev. 1-04)	Office Action Summa	ıry	Part of Paper No./Mail Date 20040716

Application/Control Number: 10/603,022 Page 2

Art Unit: 3744

#### DETAILED ACTION

#### Drawings

1. Figure 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 39 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: The structure "H2" and "G2" are not clear in the claims.
- 4. Claims 43-52 and 55-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 5. Claim 43 recites the limitation "the high temperature heat exchanger" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Application/Control Number: 10/603,022 Page 3

Art Unit: 3744

6. Claim 45 recites the limitation "the low temperature heat exchanger" in line 2. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 55 recites the limitation "the low stage generator" in line 2. There is insufficient antecedent basis for this limitation in the claim.

## Specification

8. Claim 50 is objected to because of the following informalities: "a mechanical valve" in the claim 50 probably should be "an orifice". Appropriate verification and correction are required.

### Allowable Subject Matter

- 9. Claims 37,38,41,42,53 and 54 are allowed.
- 10. Claims 39 and 40 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.
- 11. Claims 43-52 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chen-Wen Jiang whose telephone number is (703) 308-0275. The examiner can normally be reached on Tuesday-Friday from 7:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (703) 308-2597. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/603,022

Art Unit: 3744

Page 4

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chen-Wen Jiang Primary Examiner 2-2-6